

Interim cover and reshaping of the IAA Helmsdorf

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Project target: Interim cover of the free areas of the tailings in order to reduce the radioactive exposition and the transporting of dust directly in the surrounding as prerequisites for the preparation of recultivation works

Location: Zwickau /
IAA Helmsdorf

Client: WISMUT GmbH

Beneficiary: WISMUT GmbH

period: since 1997

Initial situation:



As a result of the direct recultivation of the industrial tailings pond Helmsdorf (almost 200 ha) a reduction of the pollutants via the air according to the regulations for the protection of radiation becomes an important necessity. This is achieved with the putting down of geotiles followed by a 1,5 m thick cover of local earth material from the waste rock dump Crossen. Through the weight of the cover material the consolidation process of the fine tailings is accelerated; thus enhancing the weight-bearing capacity of the subsurface, and thereby creating the basis for the subsequent reshaping and final cover of the tailings pond.

Main tasks:



- Evaluation of the measuring results carried out by rotary wing sounding (measuring grid 5 × 20 m) in areas of the fine tailings
- Release of areas of the tailings for the establishment of an interim cover after testing the stability for the installing vehicles (motorgrader, hydraulic excavator)
- Determination of the installation technology for interim cover in the released bulk area (thickness of the interim cover, distance of safety for installing vehicles, installation speed, waiting time)
- Control of course of the construction by the chief site supervisor and local monitoring